MONTHLY WEATHER REVIEW

JAMES E. CASKEY, JR., Editor

Volume 91, Numbers 10-12

Washington, D.C.

OCTOBER-DECEMBER 1963

CONTRIBUTIONS IN MEMORY OF HARRY WEXLER FOREWORD

Following the untimely death of Dr. Harry Wexler on August 11, 1962, and the shock that came from sudden loss of a warm friend and distinguished colleague, there were many suggestions by his close associates who desired to establish suitable memorials to his scientific work and his personal qualities. Among the suggestions was one that an issue of the Monthly Weather Review be devoted to scientific contributions in his honor by his associates. So numerous were his scientific friends throughout the world who could have contributed creditable papers that initial invitations were limited to his co-workers in the Bureau. Even so, the number of enthusiastic acceptances exceeded the capacity of the Review; indeed, the initial response required expansion of the memorial issue from the single number originally planned to the combined issue of three numbers.

Authors of the scientific papers in this issue feel honored to dedicate this work in memory of Wexler and his inspiring leadership and his vigorous role in advancing geophysical sciences. It is fitting that the papers in this memorial treat a wide variety of subjects; they are dedicated to a scientist whose interests were broad and who himself made significant research contributions to many of these subjects. It is also appropriate that these memorial contributions appear in the Monthly Weather Review because here Dr. Wexler published several of his earliest scientific papers. Moreover, during many years of the latter part of his Weather Bureau career, first as Chief of Scientific Services Division and finally as Director of Meteorological Research, he found time for general sponsorship of the Review in addition to his many other activities. His continuing interest in the Review and his lively encouragement of its staff nurtured its rejuvenation as a scientific journal after many years of war-imposed curtailment in scope of the periodical.

As Wexler accepted the expanding scientific responsibilities of his office and its many ex officio associations and shouldered the inevitable additions to administrative and supervisory work over the years, he did not neglect his own research work. Amazingly, his output increased, an accomplishment that is apparent in the chronological listing of his publications in the bibliography in this issue. He believed that a scientist's career as an administrator should never completely replace his pursuit of independent scientific research.

Dr. Wexler was too occupied with his scientific work to spend much time talking about his philosophy of science, but those of us who worked closely with him knew his lively curiosity for knowledge and his in-born desire to understand. Balancing his enthusiasm was a scientific maturity that steered him away from the pitfalls of pseudo-scientific fads. He believed that progress comes through attention to fundamentals. An admirer of Benjamin Franklin's scientific work, Wexler faithfully practiced what Franklin had advised: "He who would master nature must obey her laws. He must learn her laws and then obey them."

In a brief Foreword, it is not possible to capture in words the vigor and influence of a man like Wexler. In personality, he was warm and dynamic. He liked people. In devotion to science, he was untiring in his efforts and uncompromising in pursuit of facts and fundamentals. He gave himself wholeheartedly to advancement of atmospheric sciences through his own studies, through organization of seminars and symposia, through conferences and committees, nationally and internationally through trips to Antarctica and other remote places, and in many and various other activities. His fine qualities are remembered by all who knew him and his contributions will always be reflected in the pages of science history.

F. W. REICHELDERFER Chief, U.S. Weather Bureau August 20, 1963

ACKNOWLEDGMENTS

The Editor is grateful to Dr. Sigmund Fritz for suggesting that a special issue of the *Monthly Weather Review* be devoted to contributions dedicated by their authors to the memory of Dr. Harry Wexler; to Dr. F. W. Reichelderfer, Dr. Lester Machta, and Mr. Robert N. Culnan for their support and encouragement in carrying out the suggestion; to the authors for their contributions and for their cooperation in meeting tight deadlines; to the reviewers, too numerous to mention individually, for giving so freely of their time; and to Mrs. Elizabeth J. Weiss for copy editing and coordination of a multitude of details in transforming the manuscripts and illustrations into the final publication.